

Editing from the Recorder Display

SE-06-0691

Preparing to edit

The Recorder Display shows up to three tracks of the current sequence in computer notation.

You can edit the sequence note by note by changing the starting time, pitch or duration of a note or any of its real-time effects or MIDI information.

Recorder Display instructions

Recorder Display mode selection panel

Displaying the notelists for editing

When the Recorder Display first appears, track 1 is shown in the left column and the notelist displays the starting time, pitch and duration of each note.

To display the notelist of any track in any column

- Click on the heading of any column (Track 1 or No Track Displayed) and enter the number of the track you want displayed. Press Return.

To change the notelist display to show other information recorded with each note

1. Press Tab on the terminal keyboard to change the upper third of the screen to the Mode selection panel displaying new instructions and several switches.
2. Click repeatedly, if necessary, on the field of the desired switch to change selections.

The notelists change to reflect the new display mode.

MEMORY RECORDER COMPARATIVE TRACK DISPLAY

1. Enter track numbers from top-most row to display desired Tracks.
2. Press <DELETE> from top-most row to remove Track from display.
3. Move cursor with arrow keys, and enter values to change notes.
4. Use <TAB> key to view/change mode selections.
5. Press H to Print Screen. Press <ENTER> to return to Main Menu.

Track 1
"GUITAR G1-C5 1.1"

Seconds	Duration
26.000	A3 1.000
27.000	G3 1.000
27.000	D3 1.000
27.000	D3 1.000
27.000	B2 1.000
27.000	G1 1.000

MEMORY RECORDER COMPARATIVE TRACK DISPLAY

Change Selections: (SPACE)	Insert Note: +	Ped1	Ped2	ModW
Review Instructions: (TAB)	Append Note: +	RbF	Brh	Ptch
Add Independent Loop: -	Append EFX: *	RrC#2	MiPgm	SysEx
Show Times In : SECONDS Show Sound File Offsets: YES UNDO enabled: YES				
Dir/End/Name/Vol: DURATION Show Real-Time Effects: YES Note Ripple: Off				

Track 1
"GUITAR G1-C5 1.1"

Seconds	Duration
26.000	A3 1.000
27.000	ModW 100.0
27.000	D3 1.000
27.000	MPgm e
27.000	B2 1.000
27.000	G1 1.000

Track 2

Track 3

Current Catalog: W0:

switch	selections	edit functions
Show times in	Beats Measures SMPTE Feet:Fra Seconds Beats	Edit time values shown in appropriate time format.
Dur/End/ Name/Vel	Duration End Time Filename Velocity	Edit duration of note. Edit end time. Display only. Edit velocity of note.
Show Sound File Offsets	Yes No	Display only.
Show Real- Time Effects	Yes No	Edit real-time effects controllers (column 2) and values (column 3).
Note Ripple	On Off	Slide all notes on track following a note with an edited start time.

Undo

You can reverse any editing operation with the **undo** feature.

- Type CTRL-U to change the sequence to the version **before** the most recent operation.

You can toggle back and forth between versions by pressing CTRL-U repeatedly.

The undo feature uses some notespace, so if you are running low on notespace, you can toggle the UNDO Enabled switch to NO.

Editing notes

When you add or edit notes from the Recorder Display, the sequence in memory changes. If the sequence is also stored on disk, you should replace the stored version with the edited version (see "Storing, recalling and play-back").

Adding notelines

1. Place the cursor in the first or second column of the notelist where you want the new noteline added.
2. Click Append Note or type + (plus) or - (minus).

A noteline is appended directly below the noteline where the cursor is located.

The new noteline has the same start time, pitch and duration as the noteline the cursor is on. You can change these values as described on the following page.

If you add a note when the cursor is on a blank space, the new note has the start time, pitch and duration of the corresponding noteline in the adjacent notelist.

If you add a note to an empty track in an empty sequence, C1 with 0 time values and the current timbre is placed on that track.

Deleting notelines

1. Move the cursor to the noteline to be deleted.
2. Press the Delete key on the terminal keyboard.

The noteline is deleted, and the following notelines move up.

Editing the pitch of a note

1. Move the cursor to the second column of the noteline you want to edit.
2. Type in a new pitch name and octave number. (C3 is middle C.) Flats can be entered using a lower case f. For example, if you enter Bf4, it appears as A#4.
3. Move the cursor or press Return.

The note is changed in the sequencer to reflect the new pitch.

Editing the time values of a note

You can change the start time, end time or duration of any note.

1. Clicking the Show Times switch until the notelist time values are shown in the desired format.
2. If the value you want to edit is not displayed, select it by stepping the Dur/End/Name/Vel switch until it appears. You can also place the screen cursor in the third column and press the Spacebar repeatedly.

The desired time values appear in the third column of the notelist.

3. Move the cursor to the time value you want to change and type in a new value.
4. Press Return or move the cursor.

The new value appears in the notelist. The current sequence changes to reflect the edit.

When you make a change in the starting time of a note or RTE record, it moves to its new chronological position. If a large change is made, the note or record may move beyond the current display.

Editing notes (con't)

Entering SMPTE time values

When times are displayed in SMPTE format, the times may be entered without the colons and preceding zeros. For example, a SMPTE address of 01:23:45:23 is entered as:

1234523

A time of 00:00:01:23 is entered as:

123

In addition, SMPTE bits can be entered with the address. Although they do not appear on the screen, they are accepted and used by the sequencer. You enter the SMPTE address 01:23:45:23.87 as:

1234523.87

Entering time values in feet and frames

Default feet and frames settings are:

35 mm, 30 frames per second (fps)

Other settings available from the Sequence Editor Settings dialog or the Audio Event Editor's Synchronization and Time Control panel are:

35 mm, 30, 25 or 24 fps

16 mm, 30, 25 or 24 fps

Any number entered without the colon is considered to be frames. If it is larger than the number of frames per foot, it is expressed as feet and frames. For example, entering 32 with the default settings results in a display of 2:00.

Track sliding or note ripple

When you edit the start time of a note, you can slide all the notes following the edited note without affecting other tracks.

1. Step the Note Ripple switch until it shows either ON or VER.
2. Type in a new starting time and press Return.

If you selected VER, the following verification message appears at the bottom of the screen:

Type OK and press Return to perform ripple edit->

3. Type OK and press Return.

The starting times of all the notelines following the new starting time and continuing to the end of the track are adjusted.

Editing real-time effects and MIDI messages

Adding real-time effects records

1. Move the cursor to the noteline with a starting time nearest to the point where you want the RTE record.
2. Click on Append EFX or type an asterisk (*).

An RTE record having the same start time as the note on which the cursor was placed is added on the following line. If there is no RTE record earlier on this track, ModW (mod wheel) appears in the second column and 100 (full value) in the third. If an RTE record has been recorded earlier on the track, its name and value appear in the second and third columns.

3. If you want a different RTE controller or value, you can edit either as explained on the following page.

Deleting real-time effects records

1. Move the cursor to the RTE record to be deleted.
2. Press the Delete key on the terminal keyboard.

The RTE record is deleted, and the following notelines move up.

Editing real-time effects records

You can edit any real-time effect whether it was part of the original recording or added in the Recorder Display.

1. Click the Show Real-Time Effects switch to YES.

Real-time effects records appear in the notelists including a starting time, controller name and value (0-100%).

2. Move the cursor to the middle column of the RTE record and type in a different controller (to have any effect it must be a controller used by the track timbre). Use the abbreviations shown at the upper left of the Recorder Display Mode selection panel.
3. Move the cursor to the third column and type in a new value from 0 to 100%.

The new RTE record start time, controller name and value are recorded by the sequencer and affect any note on the same track with a starting time the same as the RTE record or later.

Editing real-time effects and MIDI messages (con't)

Adding and editing MIDI messages

MIDI Program change and System exclusive messages are added and edited as RTE records.

When adding a MIDI message to a sequence, it is advisable to set the start time at least 100 milliseconds (.1 seconds) before the first note using the message.

System exclusive messages on the Recorder Display include an identifier in the third column expressed either in decimal or hexadecimal units. To alternate between these two modes:

1. Click on the Dur/End/Name/Vel switch.
2. Move the cursor to the right column of the System exclusive message.
3. Press the Spacebar.

On many MIDI synthesizers, any notes being held when a Program change message is received are cut off.

Very large System exclusive messages (several screens) may cause delay on playback.

abbreviation	controller	range
Ped1	Pedal 1	0–100 in .5 increments
Ped2	Pedal 2	0–100 in .5 increments
ModW	Mod Wheel	0–100 in .5 increments
RibF	Ribbon Filter	±100 in .5 increments
Brth	Breath controller	0–100 in .5 increments
Ptch	Pitch Wheel	±12 semitones
MiPgm	MIDI program change	1–128
Pr[pitch]*	Key pressure	0–100 in .5 increments

* Pitch name is given in script notation. For example, a key pressure record for the C#2 key appears as "PrC#2."

Editing sound file offsets

The sound file offset is a point in a sound file which is marked using the Sound File Editor.

For example, a sound file might contain a sample of a bomb whistling as it falls toward the ground, followed by an explosion. If the moment the bomb explodes has been marked as an offset point from the Sound File Editor, you can display the offset time in the first column of the notelist instead of the start time.

1. Make sure the Recorder Display shows the Mode selection panel.
2. Toggle the Show Sound File Offsets switch to YES.

All notes playing a sound file with an offset are marked with a caret (^). The time displayed in the first column for those notes is the offset time. Since the offset time of one note may occur after the start time of the following note, the times listed in the first column may not be in order.

Once the offsets are displayed, you edit an offset point in the same way you edit any time value. Thus you can synchronize an offset—the bomb explosion for example—very precisely to an event on film.

Note: The playback rate of a sound file varies with the playback sampling rate which in turn varies with the pitch of the sound in the sequencer. Thus the offset time may change if you change the pitch of the sound.

Adding independent loops

Independent loops can be created on a track directly from the Recorder Display.

1. Select and display the track to receive the loop by moving the cursor to the heading of one of the notelists and entering the track number.
2. Move the cursor to the first or second column of the noteline that will be the starting noteline of the loop.
3. Type a tilde (~).

An independent loop four beats long is created on the selected track. The start time of the loop is the same as the note on which the cursor was placed when you typed the tilde (~).

4. Move the cursor to the line which displays the end of the loop. Enter a new end time if desired.

The track contains an independent loop having the start and end times you defined. The start and end times of the loop can be edited from the terminal, or you can use the START LOOP button on the keyboard control panel to edit the loop. See the section "Looping" in the manual *Sequence Editing from the Keyboard*.

When you play a track containing an independent loop, the start times of the notes in the loop increase as the loop is repeated. When the sequence has played past the end of the loop, the loop start and end times cannot be edited. In order to edit the loop times, you must restart the sequence from the beginning or rewind until you are in the first performance of the loop.